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PTO/SB/21 (6-98)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/954,571	
	Filing Date	9/11/2001	
	First Named Inventor	CHIEN, Kenneth R.	
	Group Art Unit	1646	
	Examiner Name	unknown	
Total Number of Pages in This Submission	286	Attorney Docket Number	6627PA0123

ENCLOSURES (check all that apply)		
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Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	COLLEEN J. McKIERNAN, Reg. No. 48,570
Signature	
Date	October 10, 2002

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the U. S. Postal Service as first class mail in an envelope addressed to: U.S. Patent and Trademark Office, P.O. Box 2327, Arlington, VA 22202 on this date: 10/10/2002			
Typed or printed name	Karen L. Johnson		
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of)
Kenneth R. CHIEN et al.) FOR: HIGH EFFICIENCY CARDIAC
Serial No.: 09/954,571) GENE TRANSFER
Filed: September 11, 2001) Group
Art Unit: 1646

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97(c) and 1.98

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Commissioner for Patents
Washington, D.C. 20231

Attention: Examiner

Dear Sir:

Applicants submit herewith references of which they are aware, which they believe may be material to patentability of the invention disclosed and claimed in the above-cited application and with respect to which there may be a duty to disclose in accordance with 37 C.F.R. § 1.56.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on:

October 10, 2002
(Mailing Date)

Karen L. Johnson
(Typed Name)

Karen L. Johnson
(Signature)

October 10, 2002
(Date of Signature)

Applicants are submitting herewith copies of the references which are set forth on the attached Form PT/SB/08A. As all relevant parts of the references are in the English language, no explanation of the references is provided herein.

Applicants, by their undersigned attorney, certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement. Consequently, no fee is required. However, the Commissioner is authorized to charge any fee which may be determined to be due to Deposit Account No. 02-4070, referencing Docket No.6627-PA0123.

Further, while the references provided in this Information Disclosure Statement may be material to patentability pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any reference referred to herein is prior art for this invention unless specifically designated as such.

Also, in accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists.

Respectfully submitted,

Dated: October 10, 2002

By:


Colleen J. McKiernan
Patent Agent for Applicants
Registration No. 48,570

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Docket No.: 6627-PA0123



PTO/SB/08A (08-00)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	09/954,571
				Filing Date	September 11, 2001
				First Named Inventor	Kenneth R. CHIEN
				Group Art Unit	1646
				Examiner Name	unknown
Sheet	1	of	2	Attorney Docket Number 6627-PA0123	

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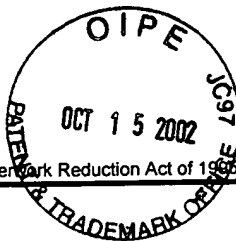
U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code ² (if known)				
	1	5,652,122		Frankel et al.	07-29-1997		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office ³	Number ⁴ (if known)	Kind Code ⁵			
	2	PCT	WO 00/25804		The Regents of the University of California	05-11-2000	
	3	PCT	WO 97/37224		Medical Research Council	10-09-1997	
	4	PCT	WO 99/30696		Orion Corporation	06/24/1999	
	5	France	2,753,722 (abstract translated)		Smithkline Beecham	03-27-1998	X
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T ²
	6	Dillmann, Wolfgang, Influences of Increased Expression of the Ca ²⁺ ATPase of the Sarcoplasmic Reticulum by a Transgenic Approach on Cardiac Contractility. Annals New York Academy of Sciences, pp. 43-48, 1998					
	7	Donahue, J. Kevin et al. Ultrarapid, highly efficient viral gene transfer to the heart. Proc.Natl.Acad.Sci. USA vol. 94, 4664-4668, 1997					

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent documents.

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	8	He, Huaping et al. Effects of Mutant and Antisense RNA of Phospholamban on SR Ca ²⁺ -ATPase Activity and Cardiac Myocyte Contractility. Circulation, 974-980, 1999	
	9	He, Huaping et al. Influence of an Antisense Phospholamban Transcribed by an Adenoviral Vector on Ca ²⁺ ATPase in Cardiac Myocytes. Journal of Molecular and Cellular Cardiology, vol. 29, No. 6, A181, 1997	
	10	Ikeda, Yasuhiro et al. In Vivo Gene Transfer of Deficient δ -Sarcoglycan Protein in BIO14.6 Cardiomyopathic Hamster Hearts. Circulation, 313, 2000	
	11	Koss, Kimberly et al. Phospholamban: A Prominent Regulator of Myocardial Contractility. Circulation Research, vol. 79, No. 6, 1059-1063, 1996	
	12	Logeart, Damien et al. Highly Efficient Adenovirus-Mediated Gene Transfer to Cardiac Myocytes after Single-Pass Coronary Delivery. Human Gene Therapy 11:1015-1022, 2000	
	13	Logeart, Damien et al. How to Optimize In Vivo Gene Transfer to Cardiac Myocytes: Mechanical or Pharmacological Procedures? Human Gene Therapy 12:1601-1610, 2001	
	14	Toyofuku, Toshihiko et al. Amino Acids Glu ² to Ile ¹⁸ in the Cytoplasmic Domain of Phospholamban Are Essential for Functional Association with the Ca ²⁺ -ATPase of Sarcoplasmic Reticulum. The Journal of Biological Chemistry, vol. 269, No. 4, 3088-3094, 1994	

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